

THE FINANCIAL INVESTOR GROUP

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Dear Mr Buckley

FIG submission to the AER on the New South Wales Gas Access Arrangement Review 2010-2015

The Financial Investor Group (FIG) welcomes the opportunity to make a submission to the AER consultation process relating to the Jemena Gas Networks Revised Access Arrangement submitted to the AER in August 2009.

The FIG's submission focuses on Jemena's proposal to use the Fama–French Three Factor Model to determine the cost of capital. The FIG notes that the AER has specifically requested comment on this issue.

The FIG

The FIG is an affiliation of eight major investors¹ in Australian energy transmission and distribution networks. FIG members compete for ownership of infrastructure assets (including regulated energy networks), as well as for investors' funds that are, or may be, seeking exposure to this asset class.

The eight FIG members have interests in well over \$30 billion of Australian energy transmission and distribution assets, most of which are regulated. This accounts for a substantial proportion of the privately owned assets of this type in Australia, and over 40% of the total value of Australian regulated energy transmission and distribution assets.

The FIG therefore has a significant interest in how energy infrastructure in Australia is regulated. The regulated cost of capital is a critical component of investment decisions, given that it typically accounts for at least 30% of regulated revenues in electricity networks and typically accounts for well over 50% of regulated revenue on pipelines.

¹ The FIG members are the APA Group, Babcock and Brown Infrastructure, Cheung Kong Infrastructure, the DUET Group, Hastings Funds Management, Hongkong Electric, Singapore Power International and Spark Infrastructure.

The FIG believes that setting a regulated cost of capital must ultimately be guided by commercial and practical considerations, as this is the perspective that investors will take when making investment decisions. Failure to do so will result in much-needed capital for energy network investment being shifted to other investment opportunities, including international investment opportunities.

Support for alternative Capital Asset Pricing Models

Estimation of the expected rate of return on equity is central to the building block regulatory model. The expected return on equity is not directly observable. At this time, the only practical approach to estimating the cost of equity in Australia is to observe past – realised – returns. These realised returns may be used to estimate the parameters of an appropriate model which generates expected rates of return on equity. One such model is the Capital Asset Pricing Model (CAPM).

Regulators should recognise the limitations that result from the application of historical data to the CAPM framework. Regulators are bound to choose CAPM variables that reflect the expected values over the coming regulatory period, but the approach to estimation of the CAPM variables has been inherently backward looking rather than forward looking. As a result, the CAPM is currently generating counter-intuitive results. CAPM determined Market Risk Premiums and Returns on Equity are falling because equity returns over the last twelve months have been low, but the increase in volatility means that the forward looking cost of equity has, in fact, increased.

In practice, a number of approaches to the application of the CAPM have been developed. The CAPM version which is mandated by the National Electricity Rules, and which has been historically applied by Australian regulators and service providers, is the asset pricing model which was developed by William Sharpe, John Lintner and others in the 1960s. The work of Sharpe, Lintner and others pioneered current thinking about asset pricing. However, since the late 1970s, financial economists have advanced well beyond the single period, partial equilibrium model referred to as the Sharpe-Lintner CAPM. The Sharpe-Lintner CAPM is now less generally accepted and is considered as no more than one of a number of special cases in a more comprehensive view of asset pricing.

The Sharpe-Lintner CAPM is a simple asset pricing rule. Multiple (linear) factor models now dominate empirical asset pricing research, and one of the most widely accepted – and tested – is the Fama-French Three Factor CAPM proposed by Jemena.

There is no requirement in the National Gas Rules (NGR) to use the Sharpe-Lintner CAPM. The principles contained in the NGR are to set a rate of return which reflects prevailing

market conditions and is commensurate with the regulatory and commercial risks involved in providing the reference service, by using a well accepted methodology. The Fama-French Three Factor CAPM meets these requirements and is therefore as valid for consideration by the AER as the Sharpe-Lintner CAPM.

In addition, there are other capital pricing models, such as those that require an estimate of the zero-beta premium (Black CAPM and Zero-Beta Fama-French Two-factor Model) that are equally relevant to the determination of utility returns. The FIG understands that the Sharpe-Lintner CAPM may underestimate the return, when compared with the results of these other models.

Regulatory determinations are currently being made at a time of great uncertainty in financial markets. Now more than ever, regulators must take account of a wide range of facts and expert opinions. An appropriate approach for regulators in determining the return of equity would be to examine a variety of capital pricing models so as to establish a range of possible outcomes. The regulator should select a point estimate towards the upper end of this range to ensure that capital investment in infrastructure continues.

Conclusion

The Sharpe-Lintner CAPM is only one of a number of asset pricing models. Other models, such as the Fama-French Three Factor CAPM proposed by Jemena are equally relevant to asset pricing, equally valid under the requirements of the NGR and should therefore be given serious and detailed consideration by the AER.

We would be pleased to discuss and elaborate on our submission if required. Please contact me in the first instance on (02) 9229 1956 or adriaan.vanjaarsveldt@babcockbrown.com

Yours sincerely

A handwritten signature in black ink, appearing to read 'A. Jaarsveldt', with a stylized flourish at the end.

Adriaan van Jaarsveldt
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On behalf of the Financial Investor Group